

Figure 1A

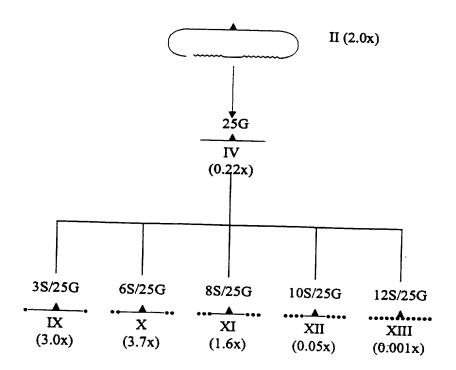


Figure 1B

Plasmids, DNA targets and chimeric oligonucleotides

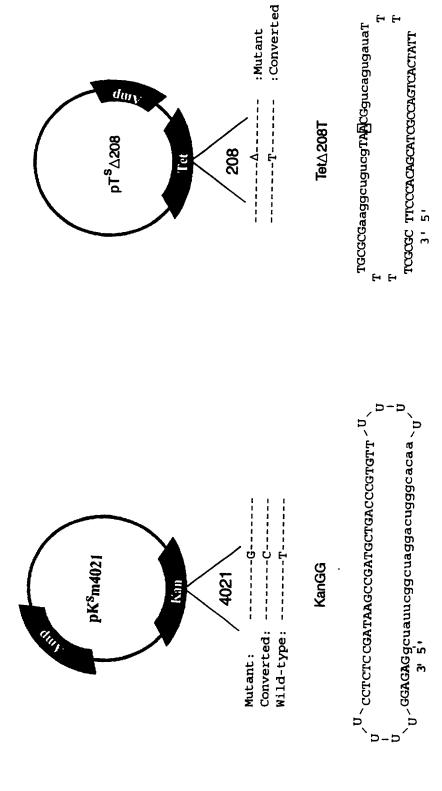


Figure 1C

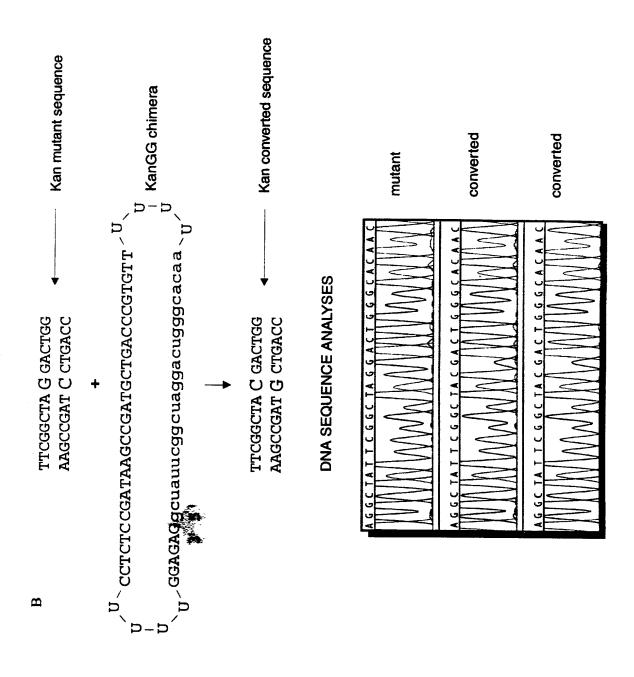


Figure 1D

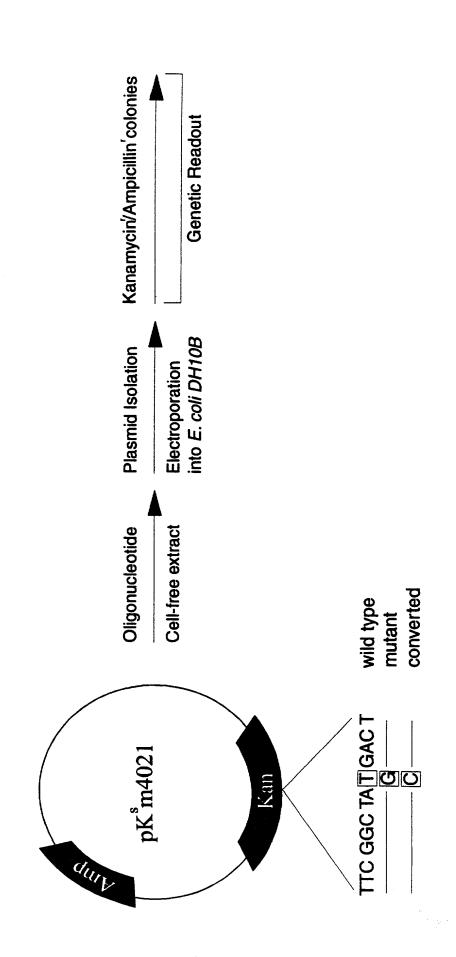
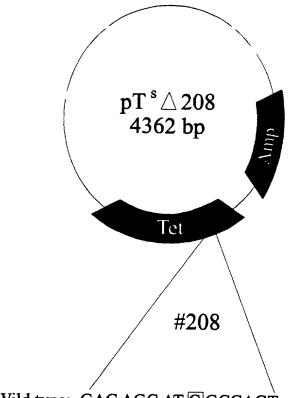


Figure 2



Wild type: GAC AGC AT CGCCAGT Mutant: GAC AGC AT - GCCAGT Converted: GAC AGC AT TGCCAGT

Sequence analysis of Tet^r plasmid △208

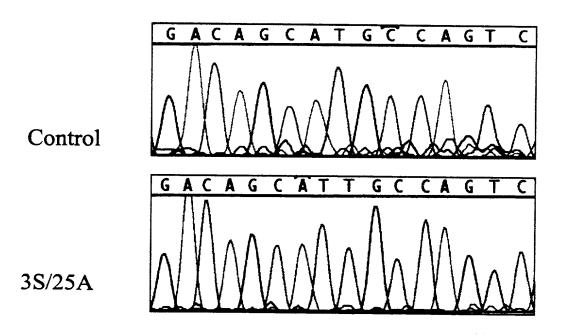


Figure 3

DNA sequence analysis of Kan^r plasmids

Target codon distribution					
oligomer	TAG	TAC	TAC/TAG	TGG	TCG
1) 3S/25G (20)		+			
2) 6S/25G (20)		+			
3) 8S/25G (20)		+			
4) 10S/25G (18)		+		+(2)	+(2)
5) 25S/25G (4)	****		+(2)	+(2)	

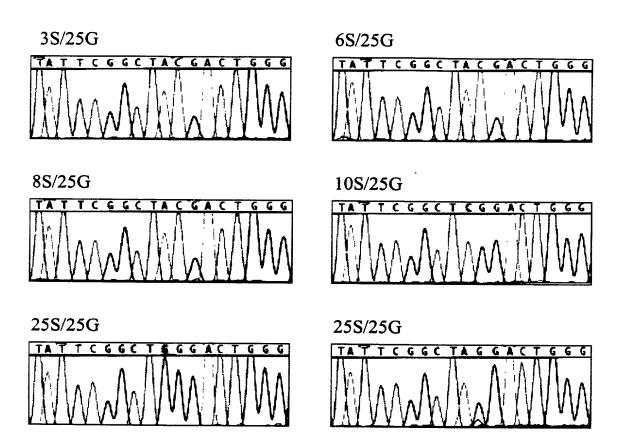


Figure 4

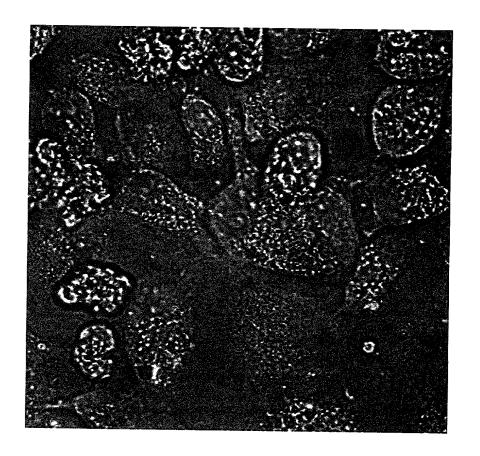


Figure 5

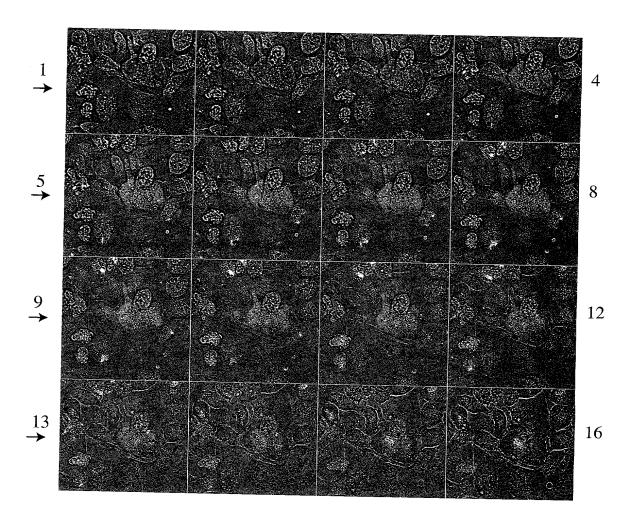


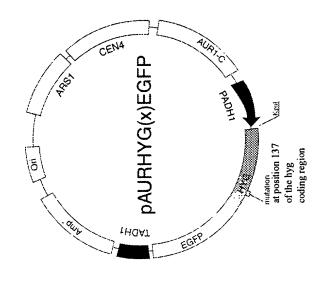
Figure 6

Sequence of normal allele: GTGGATATGTCCT Target/existing mutant: GTGGATA_TGTCCT Desired alteration:

Figure 7A

Sequence of normal allele: GTGGATATGTCCT Target/existing mutant: GTGGATAGGTCCT Desired alteration:

Figure 7B

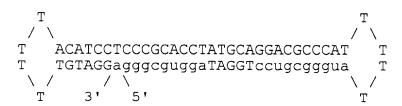


HygE3T/25: 5'-AGG GCG TGG ATA CGT CCT GCG GGT A-3'

HygE3T/74: 5'-CTC GTG CTT TCA GCT TCG ATG TAG GAG GGC GTG GAT ACG TCC TGC GGG TAA ATA GCT GCG CCG ATG GTT TCT AC-3'

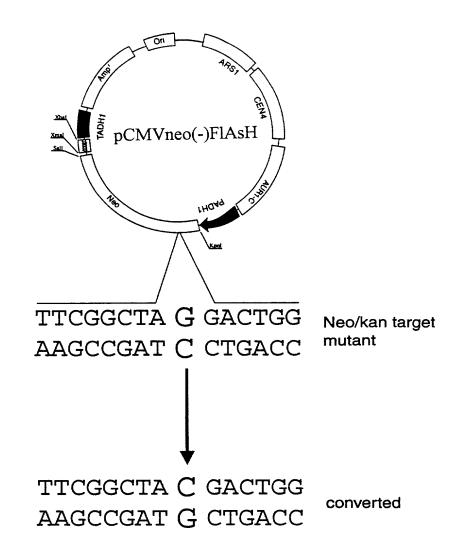
 $\frac{\text{HyqE3T}/74\alpha:}{\text{CAG}}$ 5'-GTA GAA ACC ATC GGC GCA GCT ATT TAC CCG CAG GAC GTA TCC ACG CCC TCC TAC ATC GAA GCT GAA AGC ACG AG-3'

HygGG/Rev:



Kan70T: 5'-CAT CAG AGC AGC CAA TTG TCT GTT GTG CCC AGT CGT AGC CGA ATA GCC TCT CCA CCC AAG CGG CCG GAG A-3'

Figure 8



FUSION GENE FOR LIGAND BINDING

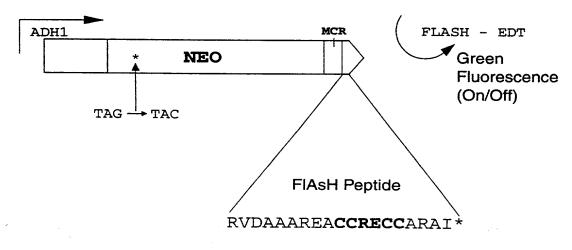


Figure 9

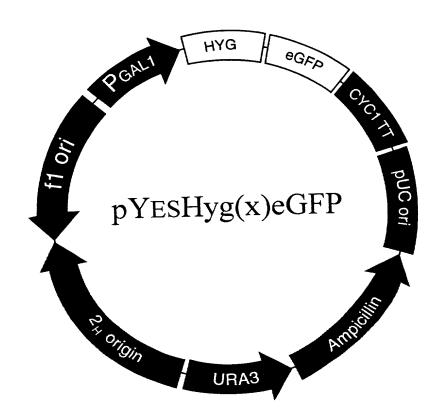


Figure 10